Yukon Influenza Surveillance Report

Influenza Season: 2009-2010

Summary Report

FluWatch Weeks 21-24 (May 23rd – June 19th, 2010)

***All data are provisional and subject to change as information is received.

Prepared by: Yukon Communicable Disease Control Report
Written: June 30, 2010

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Report Highlights

This surveillance report, produced by YCDC, summarizes influenza activity in the Yukon for the 2009-2010 season, during weeks 21-24 (May 23 – June19th, 2010). Please note that FluWatch reports are produced one week behind the current date. 2009-2010 FluWatch Weeks Calendar: http://www.phac-aspc.gc.ca/fluwatch/09-10/09-10cal-eng.php

During weeks 21-24, surveillance indicators continue to demonstrate low to no levels of influenza activity.

Pandemic H1N1 (pH1N1) Severe Outcomes

Hospitalizations

There have been no hospitalizations since week 46 (Nov 15 - Nov 21, 2009).
Since October 20th, there have been 15 pH1N1 Yukon residents admitted to hospital. Among hospitalized cases 12 of the 15 had at least one risk factor for influenza complications. 3 out of 15 hospitalized cases have been admitted to ICU.

Deaths

There have been no deaths reported since week 46 (Nov 15 - Nov 21).
Yukon has had three deaths where pH1N1 was detected; pH1N1 played a direct role in the death in two of the three individuals. The first death occurred during week 44, in a female child with underlying health conditions. The second death occurred during week 46 in an adult female, underlying health conditions were not present. A third death was announced December 9th, 2009. The death occurred in an infant who died early November; however, pH1N1 infection is thought to be coincidental and not a contributing factor in the death. A complete coroner's investigation is pending.
Link to Yukon Health and Social Services Release: http://www.hss.gov.yk.ca/news/id_213/

FluWatch Reporting

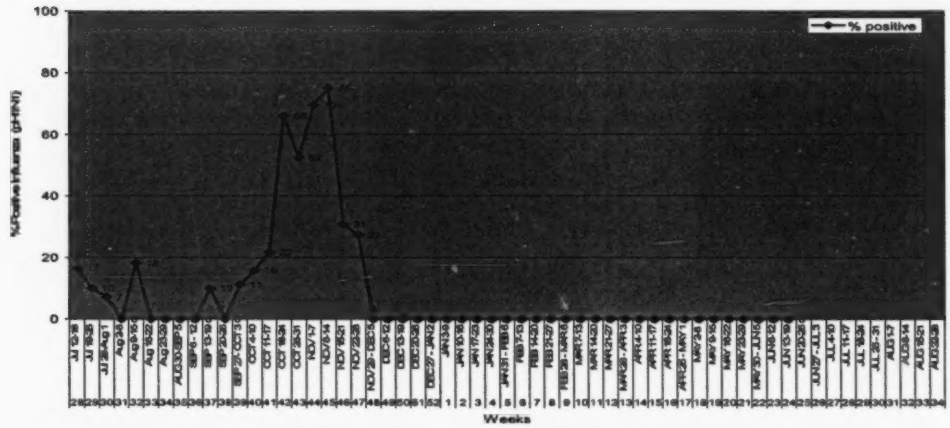
Based on FluWatch activity level definitions, Yukon has reported the following activity levels:
FluWatch activity level definition: http://www.phac-aspc.gc.ca/fluwatch/09-10/def09-10-eng.php

Weeks 21-24	No activity: no laboratory-confirmed influenza detections during the past four weeks, however, sporadically occurring ILI may be reported

Laboratory Reports

Since week 47 none of the submitted respiratory specimens have tested positive for influenza. Percentage of respiratory specimens testing positive for influenza A was highest during week 45, when percent positivity was 75%.

Percentage of Respiratory Specimens (Submitted for testing in Yukon) Diagnosed Positive for Influenza pH1N1 durning weeks 28 - 50



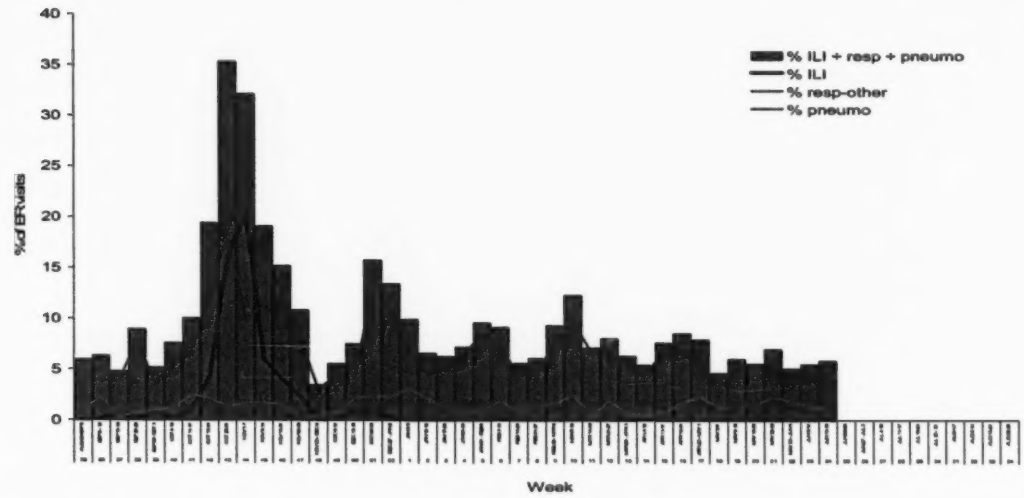
Communities with Laboratory Confirmed pH1N1

Cumulative laboratory information indicates that since April, 2009 Whitehorse and 9 out of 13 surrounding communities have had confirmed pH1N1 case reports.

Whitehorse General Hospital Emergency Visits

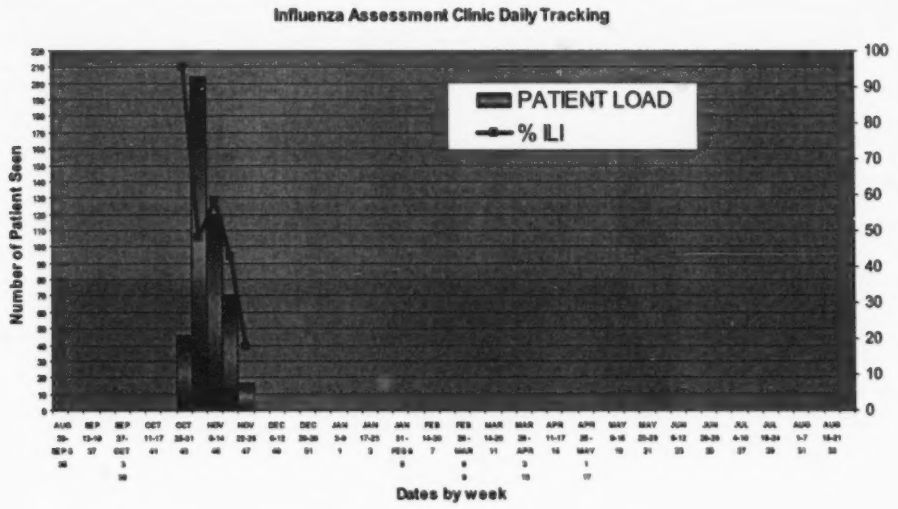
During weeks 21-24 the proportion of presentations to the WGH emergency department for respiratory symptoms identified as ILI has remained low.

Percent of WGH ER visits with influenza-like illness (ILI), other respiratory symptoms, or pneumonia by week



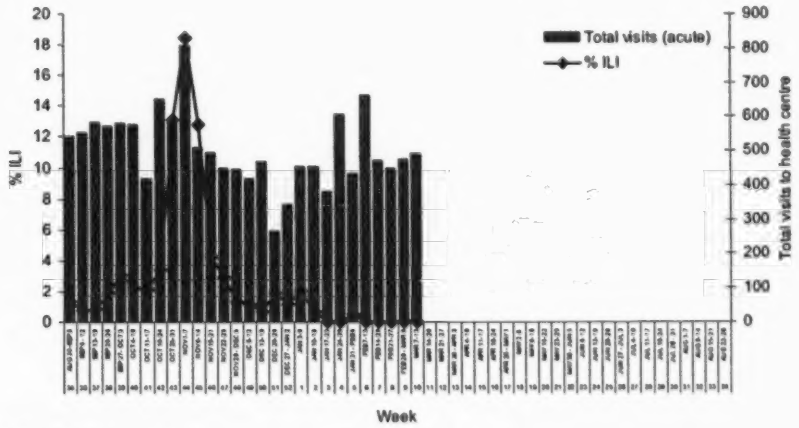
Influenza Assessment Clinic

This downtown Whitehorse clinic opened its doors on October 30th, 2009. The following graph depicts patient volume from October 30th to November 27, 2009. The clinic's last day of operation was November 27th, 2009.



Community Health Centres

Influenza-related visits to Community Health Centres (rural Yukon) increased substantially during weeks 42-44 while decreasing activity was seen from week 45 on. From week 48 on, the proportion of ILI related visits have returned to similar levels experienced in week 42 and earlier. (YCDC Data entry ongoing)

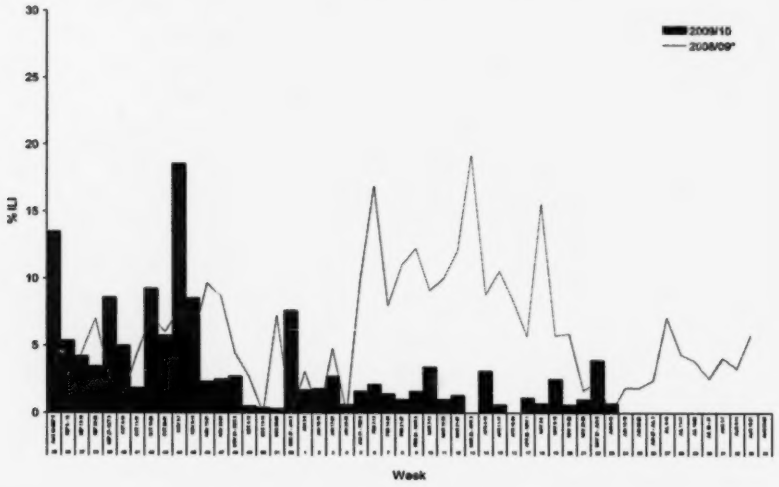


*Data provided from Community Nursing

Sentinel physicians/sites

The percentage of patients presenting to sentinel physicians or sites with ILI during weeks 21-24 was between 0% to 3.9%. During the 2008/09 season, an average of five sentinel reports were received each week. A new recruitment of sentinel physicians and sites occurred in July 2009. There are presently 18 sentinel physicians/sites across the territory; during weeks 21-24 an average of 9.5 (52%) sentinels reported. Yukon's sentinel surveillance system is comprised of all Community Health Centre's and participating physicians. (FluWatch Sentinel Surveillance Information http://www.phac-aspc.gc.ca/fluwatch/sent-eng.php)

Percentage with ILI, visits to sentinels by week

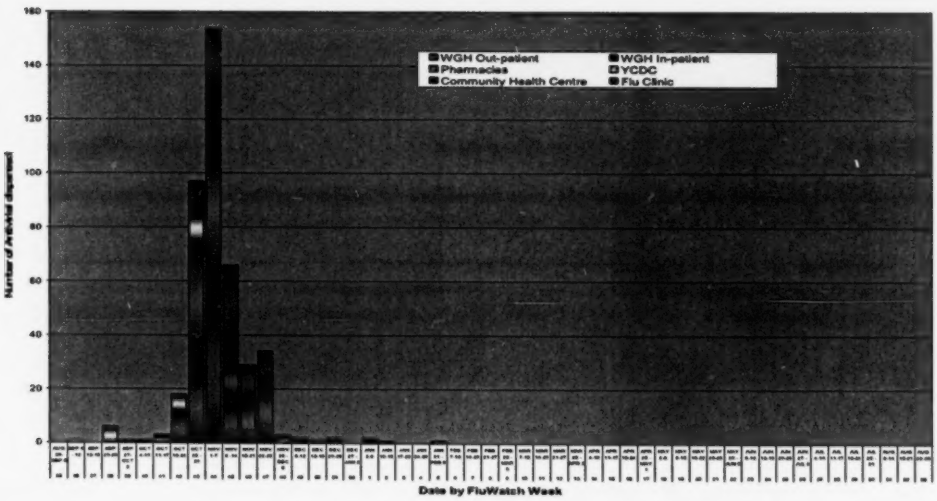


*2008/09 weeks are slightly different than those shown (following the Sun-Sat weekly pattern).

Antiviral Prescriptions/Dispensing

Antiviral prescriptions have decreased since week 45. Antiviral have not been distributed since week 5 (Jan 31 - Feb 6, 2010)

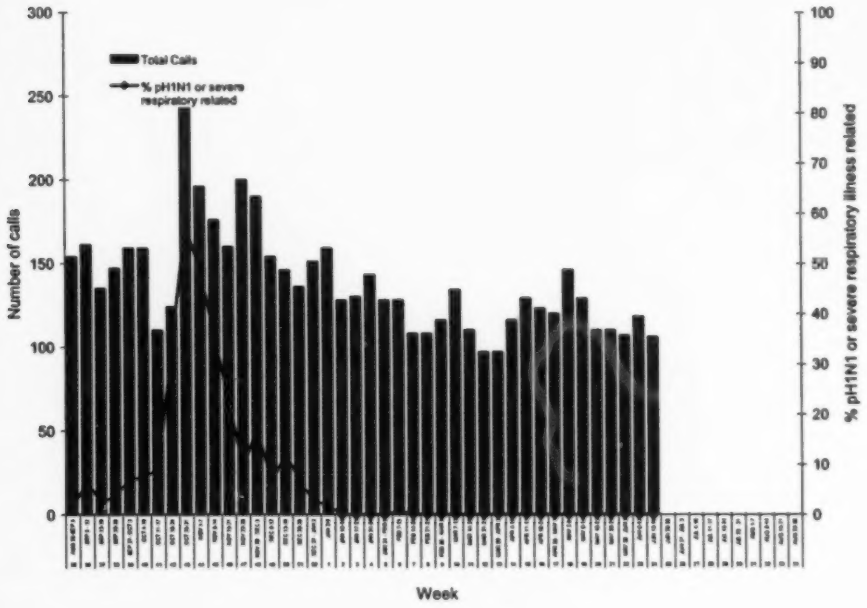
Antiviral Tracking Sheet from Week 35 to present



HealthLink 811

The graph below shows the percentage of calls related to Influenza A pH1N1 or severe respiratory illness.

Number of calls and percentage related to pH1N1 or severe respiratory illness by week



Outbreaks

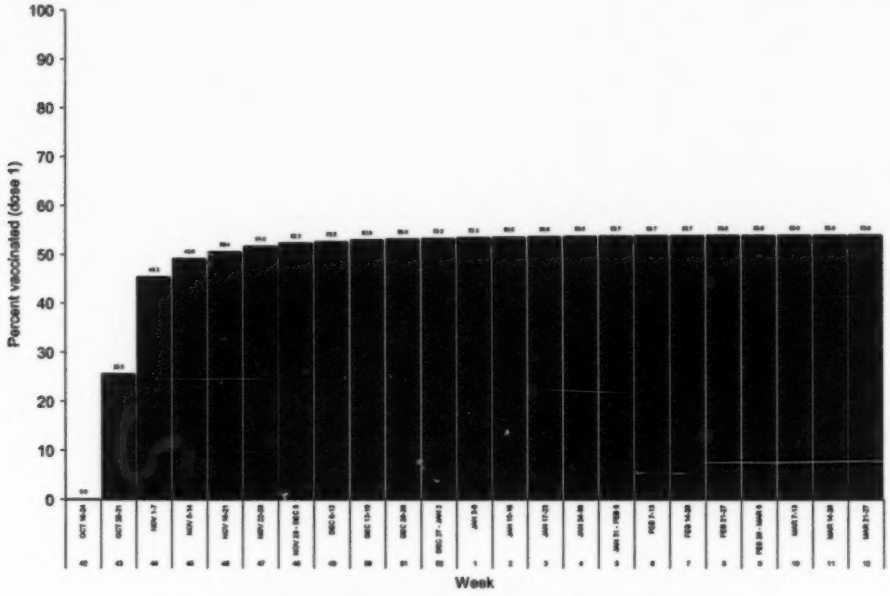
No facility outbreaks have been reported since week 43 (Oct 25 - 31, 2009). On October 29th, 2009 (during week 43) YCDC was notified of an influenza outbreak within the Whitehorse Correctional facility. The outbreak was contained to fewer than 10 residents who developed symptoms during their stay at the facility or who exhibited symptoms of influenza upon admission. Causative organism of the outbreak was identified as pH1N1. This outbreak was declared over on November 16th, 2009

Schools

There have been no reports of high absenteeism in schools since week 45 (Nov 8 - 14, 2009).

Immunization

The percentage of the population vaccinated with one dose against influenza A pH1N1 reached 53.8% in week 8. The age groups with the highest proportions vaccinated (dose 1) are those 6 months to 4 years and those 65 year or older. Vaccine administration is on going, however, due to low volume of continued vaccine uptake, this section will no longer be updated on a monthly basis.



Proportion of population vaccinated, dose 1, by week in the Yukon Territory

Age group	% Vaccinated
6 mo - 4 years	70.3
5-18 years	56.3
19-29 years	36.5
30-39 years	51.8
40-64 years	55.6
65+ years	68.9
TOTAL	53.8

*Data provided by the Community Nursing Vaccination Program.

Adverse Events Following Immunization

Of 18 400, doses administered from October 26 to March 27, 2010, 33 adverse events following immunization have been reported. The types of reports include both local and allergic reactions. None of the events fit the criteria for serious adverse events, and none required hospitalization.

Obtained from: FluWatch – Public Health Agency of Canada
June 6 to June 19, 2010 (Weeks 23 & 24)
http://www.phac-aspc.gc.ca/fluwatch/index-eng.php

FluWatch

Overall influenza activity has remained low since the beginning of 2010. All influenza indicators in Canada were still below expected levels for this time of the year.

- Two specimens (out of 1,851) in weeks 23-34 tested positive for influenza. Of the two positive specimens, one was positive for pandemic H1N1 and one was positive for influenza B.
- For weeks 23 and 24 combined, the proportion of positive parainfluenza tests (8.4%) remained high especially in AB and ON while low levels of respiratory syncytial virus (RSV) (2.6%) and adenovirus detections (2.1%) continue to be reported.
- Overall pandemic influenza activity remained low worldwide as of June 13, 2010, with geographically limited circulation of pandemic influenza virus in parts of the tropics, particularly in parts of Central America and the Caribbean and in parts of South and Southeast Asia.
  www.phac-aspc.gc.ca/fluwatch/

Canadian situation

Antigenic Characterization

Since September 1, 2009, the National Microbiology Laboratory (NML) has antigenically characterized 851 pandemic H1N1 2009 viruses and 17 seasonal influenza viruses (3 seasonal A/H1N1, 10 A/H3N2, and 4 B) that were received from provincial laboratories. Of the 851 pandemic H1N1 2009 viruses characterized, 847 (99.5%) were antigenically related to A/California/7/2009, which is the pandemic reference virus selected by WHO for the pandemic H1N1 2009 vaccine. Four viruses (0.5%) tested showed reduced titer with antisera produced against A/California/7/09. Of the ten seasonal influenza A/H3N2 viruses characterized, two were related to A/Brisbane/10/07 (2009-10 vaccine) and eight viruses were antigenically related to A/Perth/16/09 (2010 -2011 Northern Hemisphere vaccine). Three seasonal influenza A/H1N1 viruses characterized were related to A/Brisbane/59/07 (2009-10 vaccine). Of the four influenza B viruses characterized, two were antigenically related to B/Brisbane/60/08 (2009-10 vaccine). One B virus was related to the previous vaccine virus B/Florida/4/2006 (Yamagata lineage) and one B virus was related to the 2007-2008 vaccine virus B/Malaysia/2506/2004 (Victoria lineage).

Antiviral Resistance

Since August 30, 2009, 12 cases of oseltamivir resistant pandemic H1N1 2009 were reported to date in Canada while one was reported in the 2008-2009 influenza season. The last two cases were reported during week 5. All resistant cases were associated with oseltamivir treatment or prophylaxis.

International influenza update

Global information

WHO: As of June 13, 2010, over 214 countries and overseas territories or communities worldwide reported cases of pandemic H1N1 2009 (at least 18,172 deaths). The situation remained largely unchanged since the last update. Overall pandemic influenza activity remained low worldwide with geographically limited circulation of pandemic influenza virus in parts of the tropics, particularly in parts of Central America and the Caribbean and in parts of South and Southeast Asia. Of note, there have been recent media reports of increasing pandemic influenza activity in the southern Indian state of Kerala and more information is expected to become available soon. Seasonal influenza type B viruses continued to circulate at low levels across Asia and to a lesser extent across parts of Africa and South America. Recently re-emerged seasonal influenza H3N2 viruses continued to circulate in East Africa. As countries of the temperate southern hemisphere enter winter, overall only sporadic influenza activity has been detected so far.
<http://www.who.int/csr/don/2010_06_18/en/index.html>

Pandemic H1N1 Influenza Web Sites

Yukon H&SS	*www.hss.gov.yk.ca/*
PHAC:	*www.phac-aspc.gc.ca/alert-alerte/swine_200904-eng.php*
BCCDC:	*www.bccdc.ca/dis-cond/a-z/_h/HumanSwineFlu/default.htm*
BCCDC:	*www.health.gov.bc.ca/pandemic/response/index.html*
US CDC:	*www.cdc.gov/swineflu/index.htm*
WHO:	*www.who.int/csr/disease/swineflu/en/index.html*

Acronyms

ILI:	Influenza-Like Illness
pH1N1:	Pandemic H1N1 influenza or swine origin influenza
WHO:	World Health Organization

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